

APPENDIX F  
TECHNICAL SPECIFICATION SECTION 02110

**SECTION 02110: SPECIFICATION FOR PCB-CONTAINING WINDOW AND DOOR  
CAULKING, SOIL, AND SUBSTRATE REMEDIATION  
4 ELMCREST TERRACE, NORWALK, CONNECTICUT**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. PCB-containing residual window caulk and vent louver caulk containing greater than fifty (50) ppm of PCB has been identified on the exterior of window and ventilation openings at 4 Elmcrest Terrace in Norwalk, Connecticut (the building).

PCB-containing A/C sleeve caulk containing greater than fifty (50) ppm of PCB has been identified on the A/C unit sleeves under the window openings at the building.

PCB contaminated exterior stone sills containing greater than fifty (50) ppm PCB have been identified at the window openings at the building.

PCB-containing soil containing greater than fifty (50) ppm PCB has been identified in area 5 at the exterior perimeter of the building.

PCB-containing soil containing greater than one (1) but less than fifty (50) ppm PCB has been identified in areas 1 through 4 at the exterior perimeter of the building.

PCB-containing interior and exterior door caulking compounds containing greater than one (1) but less than fifty (50) ppm of PCB have been identified on the interior and exterior door frames at the building. The interior door caulk was also determined to contain regulated levels of asbestos.

PCB-containing porous substrates containing greater than one (1) but less than fifty (50) ppm PCB have been identified in the interior Concrete Masonry Units (CMU) adjacent to the door caulk and exterior brick/mortar adjacent to the PCB-containing window, louver, and A/C caulk at the exterior of the building.

PCB-contaminated non-porous steel lintels above interior doors and above exterior windows are assumed to contain greater than one (1) ppm PCB.

The removal and disposal of the caulking compounds and associated contaminated components and substrates and PCB containing soils, and the cleaning (decontamination) of contaminated steel lintels and CMU shall be performed in accordance with this section.

**1.2 GENERAL REQUIREMENTS**

- A. The Contractor shall furnish all labor, materials, facilities, equipment, installation services, employee training, notifications, permits, licenses, certifications, agreements and incidentals necessary to perform the specified work. Work shall be performed in accordance with the Contract Documents, the latest regulations from the Occupational Safety and Health

Administration (OSHA), the United States Environmental Protection Agency (USEPA), the State of Connecticut, and all other applicable federal, state and local agencies. Whenever the requirements of the above references conflict or overlap, the more stringent provision shall apply.

- B. All project personnel engaged in the remediation work covered under this section shall be trained with OSHA 40-Hour HAZWOPER training in accordance with OSHA Regulations 29 CFR 1910 and 1926 or hold current certification as Asbestos Abatement workers or supervisors and have a minimum four (4) hour PCB remediation specific training.
- C. The Contractor shall provide a Project Health and Safety Officer having a minimum of forty (40) hours HAZWOPER and eight (8) hours of supervisor training in hazardous waste site operations in accordance with the requirements of 29 CFR 1910. The supervisor must be on site at all times during remediation work.

### 1.3 GENERAL SCOPE OF WORK

- A. The Contractor shall be responsible for removing and disposing of all scheduled window frames, ventilation louvers, and associated caulk from the exterior window and vent openings as indicated in Section 3 and HM 1.1 through HM-1.5 of the *Self Implementing On-Site Cleanup and Disposal Plan For PCB Containing Caulk and Soil, 4 Elmcrest Terrace, Norwalk, Connecticut* (the SIP) as PCB Bulk Product Waste.
- B. The Contractor shall be responsible for removing and disposing of all metal A/C sleeves and associated A/C sleeve caulk from window openings as indicated in Section 3 and HM 1.1 through HM-1.5 of the SIP as PCB Bulk Product Waste.
- C. The Contractor shall be responsible for removing and disposing PCB-contaminated exterior stone window sills from window openings as indicated in Section 3 and HM 1.1 through HM-1.5 of the SIP as PCB Remediation Waste greater than fifty (50) ppm.
- D. The Contractor shall be responsible for removal and disposal of all exterior brick and mortar within four (4) inches of a previously existing exterior stone sill as indicated in Section 3 and HM 1.1 through HM-1.5 of the SIP as PCB Remediation Waste less than fifty (50) ppm.
- E. The Contractor shall be responsible for removal and disposal of all exterior brick and mortar within eight (8) inches of an existing or previously existing residual window caulk line as indicated in Section 3 and HM 1.1 through HM-1.5 of the SIP as PCB Remediation Waste less than fifty (50) ppm.
- F. The Contractor shall be responsible for removal and disposal of all exterior brick and mortar within six (6) inches of a previously existing A/C sleeve as indicated in Section 3 and HM 1.1 through HM-1.5 of the SIP as PCB Remediation Waste less than fifty (50) ppm.
- G. The Contractor shall be responsible for the cleaning and decontamination of all exterior window and door lintels to a clearance criteria of less than ten (10) micrograms per one-hundred (100) square centimeters as indicated in Section 3 and HM 1.1 through HM-1.5 of the SIP.
- H. The Contractor shall be responsible for removing and disposing of all scheduled door frames and associated excluded caulk from the door systems as indicated in Section 3 and HM 1.1

through HM-1.5 of the SIP. The door caulk also contains asbestos. The waste shall be disposed of as Mixed Regulated Asbestos – PCB Remediation Waste less than fifty (50) ppm.

- I. The Contractor shall be responsible for the cleaning and decontamination of steel lintels and remaining interior CMU/mortar from the interior door openings within eight (8) inches of a previously existing caulk line to a clearance criteria of less than ten (10) micrograms per one-hundred (100) square centimeters for steel and one (1) ppm PCB for CMU/mortar as indicated in Section 3 and HM 1.1 through HM-1.5 of the SIP.
- J. The Contractor shall be responsible for removing and disposing of all scheduled PCB-containing soil containing greater than one (1) ppm PCB as indicated in Section 3 and HM 1.1 through HM-1.5 of the SIP. Remediated soils containing greater than fifty (50) ppm PCB shall be disposed of as PCB Remediation Waste greater than fifty (50) ppm. Remediated soils containing greater than one (1) and less than fifty (50) ppm PCB will be disposed of as PCB Remediation Waste less than fifty (50) ppm.

#### 1.4 SUBMITTALS

The following documents shall be submitted to the Owner's Consultant:

- A. Work Plan: A written work plan that describes the methods to be used for the removal and containment of caulk and associated debris, and the contractor's plan to protect workers and to prevent PCB contamination migrating from the work areas. The work plan shall include the following at a minimum: Specific procedures for all removal and decontamination tasks;
  - a. Floor plans and/or site plans indicating the proposed work areas, containment barriers, fencing, signage, window screens, and erosion controls for all PCB removal work as outlined in this Specification;
  - b. The work plan shall include specific procedures to be used to decontaminate steel lintels, CMU/mortar, equipment, and tools;
  - c. Locations and specific procedures for perimeter dust monitoring;
  - d. Training Documentation: Documentation of employee training as required by Section 1.2.B and 1.2.C. of this specification; and,
  - e. The Work Plan shall be endorsed with the approval and signature of a Certified Industrial Hygienist (CIH) or Certified Safety Professional (CSP).
- B. PCB Disposal Plan: A written plan that details the Contractor's plan for transportation and disposal of PCB-containing wastes generated during the project. The Disposal Plan shall identify:
  - a. Waste packaging, labeling, placarding and manifesting procedures,
  - b. The name, address and 24-hour contact number for the proposed treatment or disposal facility or facilities to which waste generated during the project will be transported.

- c. The name, address, contact person(s) and state-specific permit numbers for proposed waste transporters, and EPA identification number for firms that will transport hazardous waste.
  - d. The license plate numbers of vehicles to be used in transporting of the waste from the site to the disposal facility.
  - e. The route(s) by which the waste will be transported to the designated disposal facility, and states or territories through which the waste will pass if the waste is to be disposed of outside of the State of Connecticut.
  - f. Material Safety Data Sheets: Material Safety Data Sheets (OSHA Form 174 or equivalent) and manufacturer's information shall be provided for all chemicals and materials to be used during the project.
  - g. The specific procedures for the determination of the waste stream components and collection and analysis of the Bulk Product Waste Stream for PCB TCLP evaluation.
  - h. The Disposal Plan shall be endorsed with the approval and signature of a Certified Industrial Hygienist (CIH) or Certified Safety Professional (CSP).
- C. The following documents shall be submitted to the Owner's Consultant within twenty one (21) calendar days following removal of waste from the site:
- a. Waste Profile Sheets
  - b. Pre-Disposal Analysis Test Results (If required by disposal facility)
  - c. Manifests signed by the disposal facility
  - d. Tipping Receipts provided by the disposal facility
  - e. Certification of Final Treatment Disposal signed by the responsible disposal facility official.
  - f. Photo documentation of all aspects of the work area preparation, remediation, waste storage, waste disposal, and equipment decontamination.

## 1.5 APPLICABLE STANDARDS AND REGULATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only. Where a conflict or overlap among regulations and/or these specifications exist, the most stringent requirements shall apply. The Owner's Consultant will determine which requirements are most stringent.
1. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)
- a. ANSI.Z89.1 Personnel Protective Equipment-Protective Headwear for Industrial Workers-Requirements (Latest Revision)ANSI.Z87

## 2. CODE OF FEDERAL REGULATIONS (CFR)

a.	29 CFR Subpart D	Walking-Working Surface
b.	29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
c.	29 CFR 1910.134	Respiratory Protection Standard
d.	29 CFR 1910.1200	Hazard Communication
e.	29 CFR 1926.20	General Health and Safety Provisions
f.	29 CFR 1926.57	Ventilation
g.	29 CFR 1926.59	Hazard Communication Program
h.	29 CFR 1926.62	Lead Exposure in Construction
i.	29 CFR 1926.65	Hazardous Waste Operations and Emergency Response
j.	29 CFR 1926.95	Criteria for Personal Protective Equipment
k.	29 CFR 1926, Subpart H	Materials Handling, Storage, Use and Disposal
l.	29 CFR 1926, Subpart L	Scaffolding
m.	29 CFR 1926, Subpart M	Fall Protection
n.	29 CFR 1926, Subpart X	Ladders
o.	29 CFR 1926, Subpart Z	Toxic and Hazardous Substances
p.	40 CFR 50.6	National Primary and Secondary Ambient Air Quality Standards for Particulate Matter
q.	40 CFR 260	Hazardous Waste Management System: General
r.	40 CFR 261	Identification and Listing of Hazardous Waste
s.	40 CFR 262	Standards Applicable to Generators of Hazardous Waste
t.	40 CFR 263	Standards Applicable to Transporters of Hazardous Waste
u.	40 CFR 264	Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
v.	40 CFR 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
w.	40 CFR 268	Land Disposal Restrictions
x.	40 CFR 700	Toxic Substances Control Act (TSCA)
y.	40 CFR 761	PCBs Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions
z.	49 CFR 105	Hazardous Materials Program. Definitions and General Procedures
aa.	49 CFR 171	General Information, Regulations and Definitions
bb.	49 CFR 172	Hazardous Material Tables. Special Provisions, Hazardous Materials Communications Emergency Response Information, and Training Requirements
cc.	49 CFR 173	Shippers-General Requirements for Shipments and Packagings
dd.	49 CFR 177	Carriage by Public Highway
ee.	49 CFR 178	Specifications for Packagings

3. NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)
  - a. Publication Number 87-10B Respiratory Decision LogicNIOSH/OSHA Booklet 3142 Lead in Construction
  - b. Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (NIOSH Publication 85-115)
4. U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)
  - a. PUB 3126 Working with Lead in the Construction Industry
  - b. 29 CFR 1910, Subpart I, Appendix B-Non-Mandatory Compliance Guidelines for Hazard Assessment and Personal Protective Equipment Selection
5. REGULATIONS OF CONNECTICUT STATE AGENCIES (RCSA)
  - a. Hazardous Waste 22a-449(c)-100 through 119
  - b. Hazardous Waste Transporter Permits 22a-449(c)-11
  - c. Permit Fees for Hazardous Waste Materials Management 22a-454-1
6. UNITED STATES ENVIRONMENTAL PROTECTION AGENCY GUIDANCE
  - a. Polychlorinated Biphenyl (PCB) Site Revitalization Guidance Under the Toxic Substances Control Act

#### 1.6 POSTING AND RECORD MAINTENANCE REQUIREMENTS

- A. The following items shall be conspicuously displayed proximate to but outside of abatement work areas. The contractor shall assure that the posted regulations are not altered, defaced or covered by other materials.
- B. Exit Routes
  1. Emergency exit procedures and routes
- C. Emergency Phone Numbers
  1. A list Indicating the telephone numbers and locations of the local hospital(s); the local emergency squad; the local fire department; the local police department; the Poison Control Center; Chemical Transportation Emergency Center (CHEMTREC); the Connecticut State Department of Public Health's office; the contractor (on-site and after hours numbers); and the environmental consultant (on-site and after hours numbers).
- D. Warning Signs
  1. Warning signs shall be In English and the language of any workers on-site who do not speak English, and be of sufficient size to be clearly legible and display the following:

WARNING:  
HAZARDOUS WASTE WORK AREA  
PCBs-POISON  
NO SMOKING, EATING OR DRINKING  
AUTHORIZED PERSONNEL ONLY  
PROTECTIVE CLOTHING IS REQUIRED IN THIS AREA

E. Items Available On-Site

1. The contractor shall maintain the following items on-site and available for review by all employees and authorized visitors:
  - a. Project Health and Safety Plan (HASP)
  - b. Certificates of Training for all workers and the project Supervisor
  - c. Codes, Standards and Publications
    - 1) Copies of applicable codes, standards, and publications
  - d. MSDS
    - 1) Material Safety Data Sheets (MSDS) for all chemicals used during the project.
  - e. Compliance Programs
    - 1) Copies of the contractor's written hazard communication, respiratory protection, and confined space entry programs.

1.7 MINIMUM REQUIREMENTS FOR WORKER HEALTH AND SAFETY

A. GENERAL

1. The contractor is responsible and liable for the health and safety of all on-site personnel and the off-site community affected by the project. All on-site workers or other persons entering the abatement work areas, decontamination areas or waste handling and staging areas shall be knowledgeable of and comply with the requirements of the site-specific Health and Safety Plan (HASP) at all times. The contractor's HASP shall comply with all applicable federal, state and local regulations protecting human health and the environment from the hazards posed by the work to be performed under this project.
2. The contractor shall not initiate on-site work in the contaminated areas until the HASP has been finalized, and approved by the Owner's Consultant.
3. Consistent disregard for the provisions of the HASP shall be deemed as sufficient cause for immediate stoppage of work and termination of the Contract or any Subcontracts without compromise or prejudice to the rights of the Owner or the Architect.
4. Any discrepancies between the contractor's HASP and these specifications or federal and state regulations shall be resolved in favor of the more stringent requirements that



provide the highest degree of protection to the project personnel and the surrounding community and environment, as determined by the Owner's Consultant.

5. In addition to exposure concerns relating to the presence of PCB, other health and safety considerations will apply to the work. The contractor shall be responsible for recognizing such hazards and shall be responsible for the health and safety of contractor employees at all times. It is the contractor's responsibility to comply with all applicable health and safety regulations.
6. The HASP shall be endorsed with the approval and signature of a Certified Industrial Hygienist (CIH) or Certified Safety Professional (CSP).

#### B. HEALTH AND SAFETY PLAN

1. The contractor shall prepare and submit a site-specific Health and Safety Plan (HASP) to the Owner's Consultant a minimum of ten (10) business days prior to commencement of abatement work. The HASP shall govern all work conducted at the site during the remediation of glazing, caulk, and related debris: waste handling, sampling, and management; and waste transportation.
2. At a minimum, the HASP shall address the requirements set forth in 29 CFR 1910.120, as further outlined below:
  - a. Health and Safety Organization
  - b. Site Description and Hazard Assessment
  - c. Training (HAZWOPER)
  - d. Medical Surveillance
  - e. Work Areas
  - f. Personal Protective Equipment
  - g. Personal Hygiene and Decontamination
  - h. Standard Operating Procedures and Engineering Controls
  - i. Emergency Equipment and First Aid Provisions
  - j. Equipment Decontamination
  - k. Air Monitoring
  - l. Telephone List
  - m. Emergency Response and Evacuation Procedures and Routes
  - n. Site Control
  - o. Permit-Required Confined Space Procedures(If Applicable)
  - p. Spill Containment Plan
  - q. Heat and Cold Stress
  - r. Record Keeping
  - s. Community Protection Plan
3. The HASP shall be reviewed by all persons prior to entry into the abatement, decontamination, or waste staging areas, whether a representative of the contractor, owner, architect/engineer, environmental consultant, subcontractors), waste transporter or federal, state or local regulatory agency. Such review shall be acknowledged and documented by the contractor's Health and Safety Officer by obtaining the name, signature and affiliation of all persons reviewing the HASP.

4. The HASP shall be maintained so as to be readily accessible and reviewable by all site personnel throughout the duration of the abatement project and until all waste materials are removed from the site and disposed of at the appropriate disposal facility.
5. The Contractor's on-site Health and Safety Officer shall be responsible for ensuring that project personnel and site visitors are informed of and comply with the provisions of the HASP at all times during the project.

#### C. WORK AREAS

1. The contractor shall establish and clearly identify work areas in the field. Access by equipment, site personnel, and the public to the work areas shall be limited as follows:
  - a. Abatement Zone- The Abatement Zone(s) shall consist of all areas where remediation, waste handling and staging activities are ongoing and the immediately surrounding locale or other areas where contamination could occur. Each Abatement Zone shall be visibly delineated with orange construction fencing at a minimum, and restricted from access by all persons except those directly necessary to the completion of the respective remediation tasks. The Abatement Zones shall be relocated and delineated as necessary as work progresses from one portion of the project site to another, to limit access to each remediation area and to minimize risk of exposure to site workers and the general public. Access shall be controlled at the periphery of the Abatement Zones to regulate the flow of personnel and equipment into and out of each zone and to help verify that proper procedures for entering and exiting are followed. All persons within the Abatement Zones shall have all required training and wear the appropriate level of protection established in the HASP.
  - b. Decontamination Zone- The Decontamination Zone is the transition zone between the remediation area and the clean support zone of the project site, and is intended to reduce the potential for contaminants from being dispersed from the Abatement Zone to clean areas of the site. The Decontamination Zone shall consist of a buffer area surrounding each Abatement Zone through which the transfer of equipment, materials, personnel and containerized waste products will occur and in which decontamination of equipment, personnel, and clothing will occur. The Decontamination Zones shall be clearly delineated with orange construction fencing at a minimum and labeled with signage as provided in Part 1.6 of this Section. All emergency response and first aid equipment shall be readily maintained in these Zones. All protective equipment and clothing shall be removed or decontaminated in the Decontamination Zone prior to exiting to the Support Zone.
  - c. Support Zone- The Support Zone will consist of the area outside the Decontamination Zones and the remainder of the project site. Administrative and other support functions and any activities that by nature need not be conducted in the Abatement or Decontamination Zone related to the project shall occur in the Support Zone. Access to the Abatement and Decontamination Zones shall be controlled by the Health and Safety Officer and limited to those persons necessary to complete the remediation work and who have reviewed and signed the HASP.

#### D. PERSONNEL PROTECTIVE EQUIPMENT

1. The contractor shall be responsible to determine and provide the appropriate level of personal protective equipment in accordance with applicable regulations and standards necessary to protect the contractor's employees and the general public from all hazards present.
2. The contractor shall provide all employees with the appropriate safety equipment and protective clothing to ensure an appropriate level of protection for each task, taking into consideration the chemical, physical, ergonomic and biological hazards posed by the site and work activities.
3. The contractor shall establish in the HASP criteria for the selection and use of personal protective equipment (PPE).
4. The PPE to be utilized for the project shall be selected based upon the potential hazards associated with the project site and the work to be performed. Appropriate protective clothing shall be worn at all times within the Abatement Zone.
5. The contractor shall provide the appropriate level of respiratory protection to all field personnel engaged in activities where respiratory hazards exist or there is a potential for such hazard to exit.
6. The contractor shall provide, as necessary, protective coveralls, disposable gloves and other protective clothing for all personnel that will be actively involved in abatement activities or waste handling activities or otherwise present in the Abatement Zones. Coveralls shall be of Tyvek or equivalent material, Should the potential for exposure to liquids exist, splash-resistant disposable suits shall be provided and utilized.
7. Protective coveralls, and other protective clothing shall be donned and removed within the Decontamination Zone and shall be disposed of at the end of each day. Ripped coveralls shall be immediately replaced after appropriate decontamination has been completed to the satisfaction of the Health and Safety Officer. Protective clothing shall not be worn outside of the Decontamination Zone.
8. Hard Hats, protective eyewear, rubber boots and/or other non-skid footwear shall be provided by the contractor as required for workers and authorized visitors, Safety shoes and hard hats shall be in conformance with ANSI Z89.1 (1969) and ANSI 241.1 (1967), respectively.
9. All contaminated protective clothing, respirator cartridges and disposable protective items shall be placed into proper containers to be provided by the contractor for transport and proper disposal in accordance with 40 CFR 262.

#### E. EMERGENCY EQUIPMENT AND FIRST AID REQUIREMENTS

1. The contractor shall provide and maintain at the site, at a minimum, the following Emergency and First Aid Equipment:
  - a. Fire Extinguishers.-a minimum of one (1) fire extinguisher shall be supplied and maintained at the site by the contractor throughout the duration of the project. Each

extinguisher shall be a minimum of a 20-pound Class ABC dry fire extinguisher with Underwriters Laboratory approval per 29 CFR 1910.157.

- b. First Aid Kit-a minimum of one (1) first aid kit meeting the requirements of 29 CFR 1910.151 shall be supplied and maintained at the site by the contractor throughout the duration of the project.
  - c. Communications-telephone communications (either cellular or land line) shall be provided by the contractor for use by site personnel at all times during the project.
- 2. The Health and Safety Officer shall be notified immediately in the event of personal injury, potential exposure to contaminants, or other emergency. The Health and Safety Officer shall then immediately notify the Owner's Consultant of same.
  - 3. If a member of the work crew demonstrates symptoms of heat or cold stress, injury, chemical exposure or other similar issue, another team member present within the delineated abatement zone (i.e., suitably equipped with appropriate PPE provisions) should remove the affected person from the delineated work site and signal/communicate to the Health and Safety Officer of the incident. Precautions should be taken to avoid exposure of other individuals to contaminated media.
  - 4. An evaluation of the person's condition shall be made by the Health and Safety Officer, to determine the appropriate course of action to administer first aid or other emergency response provision. The Health and Safety Officer shall assess the seriousness of the injury, give first aid treatment if appropriate, and arrange for appropriate emergency response from outside emergency services, if warranted.
  - 5. If soiled clothing cannot be removed, the injured person will be wrapped in a blanket while transported from the site.
  - 6. The Health and Safety Officer shall monitor the affected person to determine whether there are symptoms resulting from the exposure or injury. If there is a visible manifestation of exposure such as skin irritation, the affected party shall be referred to a medical facility for treatment and evaluation as to whether the manifestation may be indicative of a delayed or acute exposure, a secondary response to exposure such as skin infection or occupational dermatitis. All incidents of injuries and/or obvious chemical exposure shall be evaluated by the Health and Safety Officer and the Owner's Consultant to determine whether modifications to work practices and/or protective provisions are warranted.

F. STANDARD SAFETY AND HEALTH PROCEDURES AND ENGINEERING CONTROLS

- 1. The following provisions shall be employed to promote overall safety, personnel hygiene and personnel decontamination:
  - a. Each contractor or subcontractor shall ensure that all safety equipment and protective clothing to be utilized by its personnel is maintained in a clean and readily accessible manner at the site.
  - b. All prescription eyeglasses in use on this project shall be safety glasses conforming to ANSI Standard Z87.1. No contact lenses shall be allowed on the site.

- c. Prior to exiting the delineated Decontamination Zone(s), all personnel shall remove protective clothing, and place disposable items in appropriate disposal containers to be dedicated to that purpose. Following removal of PPE, personnel shall thoroughly wash and rinse their face, hands, arms and other exposed areas with soap and tap water wash and subsequent tap water rinse. A fresh supply of tap water shall be provided at the site on each work day by the Contractor for this purpose.
- d. All PPE used on site shall be decontaminated or disposed of at the end of each work day. Discarded PPE shall be placed in sealed CTDOT-approved 55-gallon barrels for off-site disposal.
- e. Respirators, if necessary due to an upgrade to Level C PPE, shall be dedicated to each employee, and not interchanged between workers without cleaning and sanitizing.
- f. Eating, drinking, chewing gum or tobacco, smoking, and any other practice that increases the likelihood of hand to mouth contact shall be prohibited within the delineated abatement and decontamination work zones. Prior to performing these activities, each employee shall thoroughly cleanse their face, hands, arms and other exposed areas,
- g. All personnel shall thoroughly cleanse their face, hands, arms and other exposed areas prior to using toilet facilities.
- h. No alcohol, tobacco, illicit drugs or firearms will be allowed on the site at any time.
- i. All personnel that are on non-prescription (i.e., over-the-counter) or prescription medication of any kind shall notify the Health and Safety Officer prior to conducting work at the site. The Health and Safety Officer will make a determination as to whether such individuals will be allowed to work on the site, and, if so, in what capacity. The Health and Safety Officer may require signed documentation from the Individual's personal physician stating what limitations may be posed by the medication or condition that may apply to that individual's work activities.
- j. Contact with potentially contaminated surfaces should be avoided, if possible. Field personnel should minimize walking through standing water/puddles, mud or other wet or discolored surfaces; kneeling on ground; and placing equipment, materials or food on ground or other potentially contaminated surface.
- k. The use of the "Buddy System" shall be employed at all times while conducting work at the site. Each employee shall frequently monitor other workers for signs of heat stress or chemical exposure or fatigue; periodically examine others PPE for signs of wear or damage; routinely communicate with others; and notify the Site Safety Officer in the case of an emergency.

## PART 2 - PRODUCTS

### 2.1 MATERIALS

- A. All materials shall be delivered in the original packages, containers, or bundles bearing the name of the manufacturer and the brand name.
- B. Damaged or deteriorating materials shall not be used and shall be removed from the premises. Material that becomes contaminated with asbestos shall be decontaminated or disposed of as asbestos waste.
- C. Polyethylene sheet in a roll size to minimize the frequency of joints shall be delivered to job site with factory label indicating four (4) or six (6) mil.
- D. Tape or adhesive spray will be capable of sealing joints in adjacent polyethylene sheets and for attachment of polyethylene sheets to finished or unfinished surfaces of dissimilar materials and capable of adhering under both dry and wet conditions, including use of amended water.
- E. All proper labeling and placards for waste receptacles shall be maintained on site in a sufficient quantity to support the project.
- F. Orange construction fence and sufficient fence posts/stakes shall be maintained on site in a sufficient quantity to support the project.

### 2.2 TOOLS AND EQUIPMENT

- A. Provide suitable tools for PCB removal.
- B. The Contractor shall have air monitoring equipment of type and quantity to monitor operations and conduct personnel exposure surveillance per OSHA requirements.
- C. The Contractor shall have available sufficient inventory on site for materials necessary for the job including protective clothing, respirators, filter cartridges, polyethylene sheeting of proper size and thickness, tape, and air filters.
- D. The Contractor shall provide temporary electrical power sources such as generators (when required).
- E. Vacuum units, of suitable size and capacities for project, shall have HEPA filter(s) capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter or larger.
- F. Real time dust monitoring system.

## PART 3 - EXECUTION

### 3.1 INTERIOR ABATEMENT ZONE WORK AREA PREPARATION

- A. Interior remediation work will include the remediation of door caulk containing asbestos and associated contaminated building components and substrates.

- B. All approaches to work areas shall be restricted with barriers (i.e. orange construction fencing) properly posted with signage.
- C. The Remediation Contractor shall establish the Abatement Zone, Decontamination Zone and Support Zone in accordance with this Specification. The boundaries of the three (3) zones shall be designated and segregated by orange construction fencing at a minimum.
- D. All interior removal work will be performed using full containment procedures as specified in the State of Connecticut Department of Public Health Standards for Asbestos Abatement 19a-332-1 through 19a-332a-16. Critical barriers shall be established, the floors shall be covered with two (2) layers of six (6)-mil polyethylene sheeting, walls shall be covered with two (2) layers of four (4)-mil polyethylene sheeting and the contractor shall establish negative pressure inside the containment with the use of negative air filtration units with HEPA filtration. Within each interior Abatement Zone, shut down and/or isolate heating, cooling, and ventilation air systems or zones to prevent contamination and dispersal of PCB to other areas of the structure. Lock and tag out circuits associated with heating and cooling units. During the work, vents within the work area shall be sealed with duct tape and polyethylene sheeting. Seal off all openings, including but not limited to corridors, doorways, skylights, ducts, grills, diffusers, and any other penetration of the work areas, with polyethylene sheeting minimum of six (6) mils thick sealed with duct tape.
- E. Prior to commencement of source and substrate material remediation activities at each work area, a containment system shall be constructed by the contractor to capture and contain all materials removed during the remediation. The interior containments shall consist of two (2) layers of polyethylene sheeting having a minimum thickness of four (4)-mil on all walls from the ceiling to the floor. The floor and ceiling surfaces shall be covered with two (2) layers of 6-mil polyethylene sheeting. Extend the polyethylene flooring a minimum of twelve (12) inches up the walls. Ensure that the wall sheeting overlaps the floor sheeting from the top. The containment shall also constitute a ceiling constructed of two (2) layers of six (6)-mil polyethylene sheeting. Utilize wood framing as necessary to support the containment.
- F. Remove all moveable objects from the work area and store in a secure location. Cover and seal all non-moveable objects with a single layer of six mil polyethylene sheeting.
- G. Create pressure differential between work areas and occupied areas by the use of acceptable negative air pressure equipment. The Remediation Contractor shall ensure required negative air pressure is obtained throughout the containment and the total volume of air within the work area is changed every fifteen (15) minutes.

### 3.2 EXTERIOR ABATEMENT ZONE WORK AREA PREPARATION

- A. Exterior remediation work will include the remediation of residual window caulk, louver caulk, A/C sleeve caulk, white door frame caulk, lintel caulk, associated contaminated building components and substrates, and soil.
- B. All approaches to work areas shall be restricted with barriers (i.e. orange construction fencing) properly posted with signage.

- C. The Remediation Contractor shall establish the Abatement Zone, Decontamination Zone and Support Zone in accordance with this Specification. The boundaries of the three (3) zones shall be designated and segregated by orange construction fencing at a minimum.
- D. To ensure that exterior work will not contaminate interior areas of the building, exterior remediation areas shall be isolated from the interior areas of the building by polyethylene sheeting consisting of two (2) layers of six (6) mil polyethylene sheeting or equivalent to prevent accidental entry and air exchange into the building. Within each exterior Abatement Zone, openings into the building interior such as unit ventilation, ducts and grilles shall be securely sealed. The sheeting shall be sturdy enough to withstand inclement weather conditions. Utilize wood framing as necessary to support the sheeting.
- E. Ground protection consisting of tarps, polyethylene sheeting, or drop clothes shall be used to protect the exterior soils and hardscapes within the abatement zone.
- F. Wind screens and erosion controls shall be established as necessary to prevent migration of contaminants.
- G. Dust suppression equipment such as HEPA filtered equipment and water misting equipment shall be in place prior to remediation.

### 3.3 REMEDIATION PROCEDURES - GENERAL

- A. Work shall be performed using appropriate engineering controls including HEPA filter equipped tools and misting to prevent exposure from the work and migration of contaminants.
- B. All debris generated during operations including but not limited to visible caulking, dust and debris shall be HEPA vacuumed continuously throughout the work shift and at the end of the work shift to avoid accumulation. Any tears or rips that occur in polyethylene barriers or ground covers shall be repaired or removed and replaced with new protections.
- C. All equipment utilized to perform cutting, or demolition of adjacent materials shall be equipped with appropriate dust collection systems. Ladders, scaffolding, or lifts utilized in the remediation shall be properly decontaminated as addressed in the Remediation Contractor's work plan prior to removal from the work area.
- D. Appropriate PCB waste containers shall be placed adjacent to abatement zones. Containers shall be lined, labeled, covered and secured.
- E. Post all approaches to each work area with PCB Warning signs. Warning signs shall be of size and type that are easily readable and are visible from all approaches to the work areas.

### 3.4 DECONTAMINATION ENCLOSURE SYSTEMS

- A. The Remediation Contractor shall establish a decontamination enclosure system, which is contiguous to each work area (Abatement Zone). The decontamination enclosure system shall consist of a series of three chambers consisting of an equipment area, shower area and clean area. The decontamination enclosure system shall be equipped with warm running water, soap and drying towels. All access to and from each work area shall be through the decontamination



system. All personnel shall be decontaminated within the decontamination enclosure. The decontamination system shall be constructed of two (2) layers of six (6)-mil polyethylene sheeting.

- B. Each work area shall contain an access log in order to maintain a list of personnel accessing the work area. Each person entering and exiting the work area shall sign the access log.
- C. Establish orange construction fence to delineate the Abatement Zone from the Decontamination Zone and post with applicable warning signs. Establish one (1) point of access into the Abatement Zone where the work area access log will be maintained.
- D. Equipment to be utilized in connection with the PCB remediation, waste collection or that will or may come in direct contact with the site contaminants shall be decontaminated prior to leaving the site to prevent migration of the contaminated residues from the project site.
- E. All non-disposable equipment and tools employed in the course of the project will be at the conclusion of each work day through the following sequence and left inside of the decontamination enclosure system:
  - 1. Initial tap water rinse, to remove gross debris
  - 2. Tap water and Alconox wash
  - 3. Second tap water rinse
  - 4. Second tap water and Alconox wash
  - 5. Final tap water rinse
- F. The wash water and decontamination liquids shall be captured and containerized in 55-gallon barrels for off-site disposal or solidified and included in the appropriate solid waste stream.
- G. Decontamination of all non-disposable equipment and tools employed in the course of the project will be performed in accordance with §761.79 (c)(2) and/or §761 Subpart S prior to removal from the enclosure system. The decontamination procedure for such tools will be addressed in the Contractor's Work Plan.

### 3.5 REMEDIATION OF EXTERIOR WINDOWS, A/C SLEEVES, AND VENT LOUVER SYSTEMS

- A. The Remediation Contractor shall establish the Abatement Zone, Decontamination Zone, and Support Zone in accordance with this Specification prior to the remediation of window systems.
- B. Prior to removing window frames, the Remediation Contractor shall remove window sashes from window openings and clean with Alconox followed by a tap water rinse prior to removal from Abatement Zone.
- C. The Remediation Contractor shall mist caulk lines with water to control dust prior to removal. Utilize hand tools to manually remove the window frames, A/C sleeves, and louvers. All caulk previously concealed by the window frames, A/C sleeves, or louvers shall be removed and immediately containerized for disposal. Caulk waste generated from the window frame, A/C sleeve, and louver removal shall be disposed of as PCB Bulk Product Waste.

- D. The remediation Contractor shall remove fasteners from window frames, A/C sleeves, and louvers. Where necessary, cut materials into manageable sections and dispose of as PCB Bulk Product Waste.
- E. The Remediation Contractor shall avoid damaging substrates scheduled to remain during window frame removal. Any substrate scheduled to remain and becomes damaged by the Remediation Contractor shall be repaired by the Remediation Contractor to equal or better quality at no additional cost to the Building Owner.
- F. The Remediation Contractor shall remove all fasteners from window, sleeve, and louver openings and dispose of as PCB Bulk Product Waste.
- G. The Remediation Contractor shall remove all exterior stone sills from window openings and dispose of as PCB Bulk Remediation Waste greater than fifty (50) ppm.
- H. Following the removal of bulk caulk material, window frames, A/C sleeves, and louvers, the Remediation Contractor shall clean visible residual caulk from all substrate materials that are to be removed. The initial cleaning shall be performed utilizing HEPA vacuuming equipment followed by wet scraping and brushing with a hard bristle brush until visible caulk residue is removed.
- I. Exterior brick/mortar scheduled for removal may be removed only after visible caulk residue is removed.
- J. The Remediation Contractor shall demolish the first two courses (eight inches from caulk line) of all exterior brick/mortar at either side of each exterior window opening (or lintel) and the first course (four inches from caulk line) of brick below the previously existing exterior sill at each exterior window opening and dispose of as PCB Remediation Waste less than fifty (50) ppm.
- K. The Remediation Contractor shall demolish exterior brick as necessary to clean the lintels from above the exterior window (and door) openings and decontaminate the steel. The steel shall be stored within the decontamination zone until verification testing proves that it has been successfully decontaminated. Upon successful decontamination, the steel may be recycled.
- L. The Remediation Contractor shall demolish the first two courses (eight inches from caulk line) of all exterior brick/mortar from all sides of ventilation louver openings dispose of as PCB Remediation Waste less than fifty (50) ppm.

### 3.6 REMEDIATION OF DOOR SYSTEMS

- A. The Remediation Contractor shall establish the Abatement Zone and Decontamination Zone in accordance with this Specification prior to the remediation of door systems.
- B. Prior to removing door frames, the Remediation Contractor shall remove doors from hinges and store on-site in a location specified by the Owner.
- C. The Remediation Contractor shall mist caulk lines with water to control dust prior to removal. Utilize hand tools to manually remove door frames and caulk from interior and exterior door openings. All caulk previously concealed by the door frames shall be removed and immediately containerize caulk for disposal. Caulk waste generated from the window caulking shall be

disposed of as Mixed Regulated Asbestos – PCB Remediation Waste less than fifty (50) ppm. Caulk, frames, and waste generated from door frame removal shall be disposed of as Mixed Regulated Asbestos – PCB Remediation Waste.

- D. The remediation Contractor shall remove fasteners from door frames to facilitate removal of the frames. Where necessary, cut frames into manageable sections. Properly label each waste package.
- E. Following the removal of bulk caulk material and frames, the Remediation Contractor shall clean visible residual caulk from the concrete headers, steel lintels, and CMU/mortar. The initial cleaning shall be performed utilizing HEPA vacuuming equipment followed by wet scraping and brushing with a hard bristle brush until visible caulk residue is removed.
- F. Interior CMU/mortar scheduled for demolition may be removed only after visible caulk residue is removed.
- G. Exterior brick/mortar scheduled for demolition may be removed only after visible caulk residue is removed.
- H. Lintels and interior CMU/mortar scheduled for decontamination may be decontaminated only after visible caulk residue is removed.
- I. The Remediation Contractor shall demolish interior first course CMU/mortar for in locations specified and disposed of as PCB Remediation Waste less than fifty (50) ppm.
- J. The Remediation Contractor shall avoid damaging substrates scheduled to remain during door frame removal. Any substrate scheduled to remain and becomes damaged by the Remediation Contractor shall be repaired by the Remediation Contractor to equal or better quality at no additional cost to the Building Owner.
- K. The Remediation Contractor shall remove all fasteners from door jambs and dispose of as Mixed Regulated Asbestos - PCB Remediation Waste less than fifty (50) ppm.

### 3.7 CLEANING AND DECONTAMINATION OF PCB CONTAMINATED SUBSTRATES

- A. Following the removal of bulk caulk and door frames from the specified interior door openings, the Remediation Contractor shall decontaminate the first course of interior CMU/mortar (eight (8) inches from caulk lines).
- B. The initial cleaning shall be performed utilizing HEPA vacuuming equipment followed by wet scraping and brushing with a hard bristle brush until visible caulk residue is removed followed by a solvent wash and/or scarification per the Remediation Contractor's Work Plan.
- C. Mechanical tools or equipment used shall be equipped with a HEPA attached dust collection device. Procedures used for decontamination shall not alter the structural integrity of the substrate.

### 3.8 PCB CONTAMINATED SOIL REMEDIATION

- A. The Remediation Contractor shall establish the Abatement Zone and Decontamination Zone in accordance with this Specification prior to the remediation of PCB contaminated soil.
- B. The Remediation Contractor shall remove PCB contaminated soil. Soil shall be lightly misted with water to control emissions during removal.
- C. The Remediation Contractor shall remove soil down to a minimum depth of ten (10) inches from the surface.
- D. The Remediation Contractor shall begin soil removal at the closest point to the building working outward and away from the building. The Remediation Contractor shall avoid tracking back over remediated soil areas.
- E. The Remediation Contractor shall immediately containerize soil for disposal as PCB Remediation waste greater than or less than fifty (50) ppm in accordance with the waste classification. Properly label containers prior to removal from the Abatement Zone.
- F. Soil disposal containers shall be thoroughly decontaminated prior to transport to the waste storage location.
- G. Soil sampling will be performed in accordance with 40 CFR 761 Subpart O in and around the Abatement Zone following the completion of soil remediation to evaluate post remediation PCB in soil concentrations.
- H. The Remediation Contractor shall address procedures for the prevention of the contamination of equipment or the decontamination of equipment used in soil remediation in the Work Plan.

### 3.9 ON-SITE WASTE MANAGEMENT

#### A. SOLID WASTES

- 1. All solid waste material containment system components, used personnel protective equipment, and other solid wastes generated during the work, shall be placed directly in appropriate waste receptacles immediately upon removal from its in-situ position. Suitable waste receptacles may consist of roll-off containers or CTDOT-approved 55-gallon barrels.
- 2. If roll-off containers are to be utilized for containerization of the remediation wastes, the following shall apply:
  - a. All roll off containers or other similar vessels utilized shall be leak tight and lined with six (6)-mil polyethylene sheeting or equivalent impermeable lining, and equipped with a secured and impermeable cover.
  - b. The impermeable cover shall remain securely in place at all times when material is not being actively placed in the vessels. The contractor shall be responsible for ensuring that the cover remains securely intact until the container is removed from the site.

3. If 55-Gallon barrels are to be utilized for waste containerization, the barrels shall consist of suitable DOT-approved 55-gallon barrels that are watertight and free of corrosion, perforations, punctures, or other damage. All barrels shall have ring lock lids and shall be sealed at the conclusion of each workday. The waste containers shall remain staged at the site with a secure impermeable cover in place until the materials are transported from the site to be delivered to the designated disposal facility.
5. A waste roll off and barrel staging area shall be designated prior to initiation of the remediation work, and approved by the Owner's Consultant.
6. Waste streams classifications or summarized in Section 2.4 of the Self Implementing On-Site Clean Up and Disposal Plan (SIP).
7. Signage indicating the disposition of the waste (i.e. < 50 ppm PCB, ≥ 50 ppm PCB) shall be posted on each container.
8. PCB storage containers and areas shall be marked in accordance with §761.40 and §761.45.

#### B. DECONTAMINATION FLUIDS AND LIQUID WASTE MATERIALS

1. Under no circumstances shall decontamination fluids or liquid wastes be discharged to the ground surface or subsurface at the site.
2. Liquid materials, including equipment or personal decontamination fluids or similar liquids generated during work at the site shall be placed directly into appropriately sized and sealed vessels immediately upon generation.
3. Acceptable vessels for the storage of liquid wastes may include DOT approved 55-gallon barrels, steel or polyethylene tanks, fractioning tanks or tank trucks. All proposed vessels shall be compatible with the intended liquid contents.
4. Container staging areas shall be designated prior to initiation of the removal work and approved by the Owner's Consultant.
5. All storage vessels to be used in the containerization and transportation of liquid waste materials shall be free of corrosion, perforations, punctures or other condition that may impair its ability to securely contain liquid.
6. Temporary staging of liquid waste vessels at the site shall be in a manner that will prevent freezing of contained liquids. Should the potential exist for liquid containers to freeze during exterior storage at the site, arrangements shall be made with the Owner's Consultant to identify and utilize an appropriate alternate storage location acceptable to the Owner's Consultant.
7. All liquid storage vessels utilized and staged at the site shall be stored in an area on the property that will not interfere with facility operations or normal flow of vehicle or pedestrian traffic, and in a manner that will minimize the potential for tipping, vandalism or damage by vehicular traffic.

8. All characterization of waste, testing, analytical fees for disposal purposes shall be borne by the Remediation Contractor.

C. LABELING OF WASTE CONTAINERS

1. All waste containers must be labeled with the name of the waste contained; the date in which the first material was placed in the vessel; and the last date at which addition of waste occurred.
2. All waste containers containing caulk or caulk debris, containment system components, used personnel protective equipment, personal and equipment wash water and decontamination fluids, or other wastes generated during the remediation work shall be labeled as follows:

HAZARDOUS WASTE-Federal law prohibits improper disposal.

If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator's Name: \_\_\_\_\_

\_\_\_\_\_

Manifest Document No.: \_\_\_\_\_

3. Such marking must be durable, in English and printed on or affixed to the surface of the package or on a label, tag or sign; displayed on a background of sharply contrasting color; un-obscured by labels or attachments and located away from any other marking (such as advertising) that could substantially reduce its effectiveness.

3.10 WASTE TRANSPORTATION AND DISPOSAL

- A. All waste packaging, labeling and transportation activities shall be performed in accordance with applicable State of Connecticut and US Department of Transportation Regulations at 49 CFR Parts 171, 172, 173, 177, and 178, and any and all other applicable federal, state and local laws and regulations.
- B. All hazardous wastes shall be shipped using state-specific standard manifest documents. The Contractor shall supply and complete the manifest documents in accordance with all applicable state and federal regulations. All manifest documents shall be signed by a representative of the Owner and appropriate copies shall be provided to the Owner's representative prior to removing the waste from the site.
- C. The Contractor or their designated waste disposal subcontractor providing waste transportation services shall possess a valid Waste Hauler's Permit issued by the State of Connecticut Department of Energy and Environmental Protection (CTDEEP). In addition, if the waste is to be transported and disposed of out of the State of Connecticut, applicable permits for those states or territories through which the waste will be transported and for where it will be disposed will be required. It is the responsibility of the Contractor to identify the appropriate disposal facility and associated travel route(s) and to identify the pertinent permits that will be required and to provide copies of the applicable permits to the Owner's Consultant prior to removing the waste from the site.

- D. The Remediation Contractor shall be responsible for applying for, obtaining and payment of all permits and temporary hazardous waste generator identification numbers to support the project.

### 3.11 CERTIFICATION OF REMEDIATION WORK

- A. The Contractor shall certify in writing to the Owner's Consultant that all remediation work and waste disposal has been completed in accordance with this specification and all applicable federal and state regulations.
- B. The Contractor shall certify in writing to the Owner's Consultant that each piece of equipment used in the Abatement zones or which has come in or potential come Into contact with contaminated material has been decontaminated prior to removal from the site.

### 3.12 OWNER'S CONSULTANT POST REMEDIATION CERTIFICATION

- A. Following the completion of the removal of PCB Bulk Product Waste and PCB Remediation Waste, Eagle shall implement the following sampling verification plan in accordance with §761.61 (a)(6)(v)(A)(6) and Subparts O and P and conduct waste characterization in accordance with §761.61 Subpart R.
- B. Upon completion of work in each area, a visual inspection of all remediated surfaces for visible evidence of dust and debris shall be performed. Surfaces shall also be inspected for visible PCB source materials that may not have been removed. The visual inspection shall provide in a preliminary way, verification that remediation work has been completed in accordance with this Plan. The visual inspection shall ensure that no visible dust or debris is present on adjacent surfaces where caulks and substrates were removed. In addition to the remediated surfaces, the surfaces of protective coverings and isolation barriers shall be inspected to ensure they are cleaned of dust and debris. No verification sampling shall be performed until the visual inspection is complete and the clearance criteria satisfied.
- C. Verification Wipe Samples
  - a. Verification wipe samples will be collected from the surfaces of decontaminated steel lintels in strict accordance with §761 Subpart P.
  - b. The criteria for successful verification shall be ten (10) micrograms (µg) per one-hundred (100) square centimeters (cm<sup>2</sup>) of surface.
  - c. If any location exceeds this clearance objective, the owner's consultant will discuss additional remedial actions with the owner that may include addition cleaning or removal and disposal.
  - d. Samples will be analyzed at Phoenix Environmental Laboratories, Inc. located in Manchester Connecticut. PCB will be extracted from samples using USEPA Extraction Method 3540C and were analyzed using EPA method SW846 8082.

D. Verification Bulk Samples

- a. Verification bulk samples will be collected from cleaned CMU/mortar and remediated soil areas within the regulated work areas in strict accordance with §761 Subpart O.
- b. The criteria for successful verification shall be less than or equal to one (1) ppm PCB.
- c. If any location exceeds this clearance objective, the owner's consultant will discuss additional remedial actions with the owner that may include additional cleaning or removal and disposal of CMU/mortar and/or additional removal and disposal of soil.
- d. Samples will be analyzed at Phoenix Environmental Laboratories, Inc. located in Manchester Connecticut. PCB will be extracted from samples using USEPA Extraction Method 3540C and were analyzed using EPA method SW846 8082.

E. Bulk Product Waste Characterization

- a. The Contractor may conduct TCLP characterization of the PCB Bulk Product Waste streams in accordance with §761 Subpart R.
- b. If the TCLP leachate is reported to be less than ten (10) micrograms per liter (ug/l, ppb) PCB, then the waste will be transported to and disposed of in a state-approved non-hazardous solid waste disposal facility in accordance with §761.62(b)(ii).
- c. Samples will be analyzed at Phoenix Environmental Laboratories, Inc. located in Manchester Connecticut. PCB will be extracted from samples using USEPA Extraction Method 3540C and were analyzed using EPA method SW846 8082.

- F. Areas that do not meet the required clearance criteria shall be re-cleaned and at no additional cost to the owner.

END OF SECTION 02110